### **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-013224 Address: 333 Burma Road **Date Inspected:** 15-Mar-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes No Zhou Cheng/Zhu Zhong Hai **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component: OBG** Components

### **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Hiranch Patel, was present during the times noted above for observations relative to the work being performed.

#### Bay#19-Suspender Bracket.

During random Quality Assurance visual review of the Suspender bracket components, this Quality Assurance Inspector (QA) discovered the following issue:

- ZPMC personnel performing repairs on a total of fifteen (15) transverse cracks measuring from 8 mm to 10mm in length without the prior approval of the engineer.
- The repairs were carried out on the suspender bracket component designated as SB010-042, in the seal weld joining the bracket bottom Plate (SB42E-C) to the anchor plate (X60L).
- -The weld designation is SB010-042-026.
- -The transverse cracks were discovered by ZPMC (MT) Technicians.
- -This component is located in OBG fabrication Bay 19.

For further information, please see the attached pictures below. Please see incident report written on this date.

#### Bay#14

SMAW welding of weld joint Seg3005H-007 located on Segment12BW. Welder is identified as 037996 (4G). ZPMC QC is identified as Li Ming Yang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-Tc-U4b-FCM-1.

SMAW welding of weld joint Seg3005H-008 located on Segment12BW. Welder is identified as 037996 (4G).

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ZPMC QC is identified as Li Ming Yang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-Tc-U4b-FCM-1.

SMAW welding of weld joint Seg3005J-007 located on Segment12BW. Welder is identified as 037996 (4G). ZPMC QC is identified as Li Ming Yang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-Tc-U4b-FCM-1.

FCAW welding of weld joint Seg3005B-015, 016 located on Segment12BW. Welder is identified as 045227 (3F). ZPMC QC is identified as Li Ming Yang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2132.

FCAW welding of weld joint Seg3005C-015, 016 located on Segment12BW. Welder is identified as 201215 (3F). ZPMC QC is identified as Li Ming Yang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2132.

Unless otherwise noted, all observed on this date appeared to generally comply with applicable contract documents.





#### **Summary of Conversations:**

No relevant conversations.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Patel, Hiranch	Quality Assurance Inspector
Reviewed By:	McClendon, Timothy	QA Reviewer